COOL WEATHER

MATERIAL SAFETY DATA SHEET

1 - Preparation and company identification

Identification of the preparation Olio PAG 46 0079350024500 007935090710 007935090660

Preparation use	Compressor lubricant.
Company	Magneti Marelli Aftermarket Sp. z o.o. Plac pod Lipami 5 40-476 Katowice, Poland +48 32 60 36 146
Emergency telephone	112 / 999 -
Business references	mail: checkstar@magnetimarelli.com

2 - Hazards identification

Information	None
Hazards	The substance is not regarded as hazardous according to the Directive 1999/45/EEC.
Main risks to health/environment	No particular risks in normal working conditions of the product. We recommend, however, to keep normal personal hygiene and to avoid frequent contacts and over an extended period of time. Use according to good working practice avoiding to dispel the product in the environment.

3 - Composition / Information on ingredients

Ingredients composition

Phosphoric acid esters, amine salt	<0,20	%	N R51/53

Please refer to section 16 for more information about R phrases referred to.

Components information	The content of DMSO extract, determined with the IP 346/92 method is lower than 3% in weight.
Chemical composition	Base synthetic oil with additives.

4 - First aid measures

First aid measures are necessary for the preparation use

Inhalation	In case of exposure to high concentration of oil mist, move into fresh air. If breathing is labored, administer oxygen. If breathing has stopped, apply artificial respiration. If you suspect that there has been inhalation, urgently go to hospital with the patient.
Contact with the eyes	Immediately flush eyes with large amounts of water and keep eyelids open for a few minutes. Get prompt medical attention.
Contact with the skin	Remove contaminated clothing. Wash thoroughly with water and then with soap and water. If symptoms persist, seek medical attention.
Ingestion	Do not induce vomit to avoid sucking through the respiratory tract. Seek medical help.

5 - Fire-fighting measures

Fire-fighting equipment	Extinguish flames with foam, dry chemicals, CO2.
Inappropriate extinguishers	Do not use direct water jets. Use water jets just to cool down surfaces exposed to fire.
Specific dangers in case of exposition to the chemicals, its combustion products or gases	Avoid breathing combustion fumes that, in case of fire, can form sulphur, phosphorus, nitrogen and unburnt hydrocarbon compounds and other derivates potentially dangerous.
Specific protective equipment for fire-fighting personnel	Wear protective overalls with self-breathing equipment.

6 - Accidental release measures

Person - related safety precautions	Wear gloves and protective glasses. In case of spillage of considerable quantities into bordering place, avoid to breathe exhalations; air the environment or wear protective breathing apparatus. Remove any possible ignition sources.
Environmental precautions	Avoid to disperse and to drain the product on ground, into sewers and surface waters. If necessary inform the relevant local authorities.
Decontamination procedures	In case of significant amount of spilled product, control and transfer the product in suitable containers. Spillage on ground: Control spilled product with earth or sand. Clean up spilled product and dispose according to local regulations. Spillage in water: Border immediately the spillage. Remove spilled product from the surface with mechanical equipment.

7 - Handling and storage

Handling	Avoid direct contacts with the product. Do not breathe aerosol or product mist guaranteeing a suitable ventilation in working areas. Do not smoke and avoid any contact with ignition sources. Keep containers closed when not used.
Storage	Keep the product in originals containers. Storage in a fresh place, away from heating sources and direct sun exposition. Avoid to accumulate electrostatic charge. Keep closed and covered the containers to avoid infiltrations of rain. Maintain suitable ventilation of the work place.
Empty containers	The containers contain product residues. Dispose the containers in safe ecological way according to the local regulations.

8 - Exposure controls / personal protection

According to data in our possession, any component presents exposure limits in working place.

Breathing equipment	Not necessary under normal working conditions. Keep oil hazes within the TLV-TWA limit of 5 mg/m3. (A.G.C.I.H. 2000). Use masks with filters for organic vapours in case of exposure superior to the fixed limits.
Hands and skin protection	Wear gloves and protective overalls; change immediately contaminated clothes and wash them thoroughly before use. We recommend to keep normal personal hygiene and of working clothes. Wear gloves only after having thoroughly washed your hands.
Eyes protection	Wear safety protective glasses where it is possible to be in contact with the product.
Exposure control	Avoid the formation of hazes or aerosol and use ventilation or localized aspiration if necessary.

9 - Physical and chemical properties

Physical status- :	Liquid
Colour- :	Colourless
Odour- :	Typical
pH :	5,5 - 7,5 (16,7% isopropanol/water)
Water Solubility- :	Partially soluble
Density at 15℃kg/l :	0,990
Kinematic Viscosity at 40℃cSt :	48,2
Flash Point (C.O.C.)℃ :	205
Pour Point℃ :	-39

10 - Stability and reactivity

Conditions to avoid	High temperature (>150℃) can cause decomposition w ith development of odorous and toxic smoke.
Reactivity	Avoid contacts with strong acid, strong bases and oxidation agents. Avoid extreme heat and high energy sources of ignition.
Stability	Stable product in normal applications.

11 - Toxicological information

Strong toxicity

	LD50 oral	LD50 skin
Phosphoric acid esters, amine salt	5000	2000

Oral toxicity	LD50 (rats): > 2000 mg/kg (estimated). The product if ingested can irritate the digestive apparatus and induce vomiting, cause nausea and diarrhea.
Skin contact	LD50 skin (rabbit) > 2000 mg/kg (estimated). Frequents and continuous contacts could degrease skin and cause dermatitis.
Eyes contact	It can cause light irritation.
Inhalation	Long term exposure to the product mist can cause irritation to the respiratory system.
Chronic toxicity	No known effect.

12 - Ecological information

Mobility	Logarithm of the coefficient of distribution ottanolo/water is considered to be < 3.
Persistence and	More than 90% of components are classified ad biodegradable (BOD28 > 60%).
Accumulation	Not determined.
Ecotoxicity	In compliance with EEC Regulations the product is not regarded as hazardous to the environment.
Ecotoxicity Test	LC50 acute for freshwater fish: > 5000 mg/L. LC50 acute for freshwater invertebrates: 500 - 5000 mg/L. EC50 acute for algae: 500 - 5000 mg/L. LC50 acute for saltwater fish: 500 - 5000 mg/L. LC50 acute for saltwater invertebrates: > 5000 mg/L.

13 - Disposal considerations

General information	Do not dispel the environment. Comply with the current laws.
Disposal	Discharge the exhausted products and the containers through the authorized industries in compliance with the state and local regulations for disposal of this type of waste.

14 - Transport information

Not hazardous for the transport.

Transport name	OLIO PAG 46

15 - Regulatory information

Hazard symbols	None
R Phrases	None
S Phrases	None

16 - Other information

Relevant R Phrases	R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Warning	The information presented in this Material Safety Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. The purpose of this data sheet is to inform and assume a correct technological use of the product. ELKE SAS does not take any responsibility resulting from any damage or injury resulting from abnormal use.
Reference laws	This Safety Data Sheet complies with the Regulation 1999/45/EEC, 2006/8/EEC and is in compliance with the regulations (EEC) 1907/2006 (REACH).